

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp	
L3	299	hanger same tree same string same assembly	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/21 07:43	
L4	203	I3 and wellhead	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/21 07:43	<i>nae</i>
L5	239	I3 same (above surface rig deck)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/21 07:44	
L6	152	I5 and wellhead	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/21 07:44	<i>nae</i>
L7	23	(US-20040074635-\$ or US-20030111228-\$ or US-20060108118-\$ or US-20050121198-\$ or US-20040079529-\$ or US-20020074124-\$ or US-20040262010-\$ or US-20040112604-\$ or US-20030155126-\$).did. or (US-6776230-\$ or US-6408947-\$ or US-6227300-\$ or US-7063157-\$ or US-6557638-\$ or US-4373584-\$ or US-4053023-\$).did. or (US-3206227-\$ or US-3256937-\$ or US-3086590-\$ or US-3373806-\$ or US-3062288-\$ or US-3508609-\$ or US-3332481-\$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/21 08:56	<i>nae</i>
L8	14	I7 and horizontal	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/21 09:10	<i>nae</i>

## EAST Search History

S1	316	horizontal adj tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:25	
S2	264	S1 and above	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 16:17	
S3	88	S1 same above	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 16:17	<i>nac</i>
S4	2652177	assembly	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:25	
S5	316	horizontal adj tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:25	
S6	211	S5 and S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:25	<i>nac</i>
S7	1993	tubing adj hanger	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:25	
S8	114	S7 and S6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:26	<i>nac</i>

## EAST Search History

S9	476	completion adj string	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 07:27
S10	6	S9 and S8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:11
S11	167846	above adj5 water	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:13
S12	53990	("166").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/18 10:13
S13	3048	S11 and S12	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:13
S14	11208	christmas adj tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:13
S15	197	S14 and S13	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:13
S16	1993	tubing adj hanger	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:14

*nac*

*nac*

## EAST Search History

S17	39	S15 and S16	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/18 10:14	<i>nal</i>
S18	2	("20050028980").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/20 10:41	<i>nal</i>
S19	49	horizontal adj christmas adj tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 10:48	<i>nal</i>
S20	23	S19 with tubing adj hanger	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 10:41	<i>nal</i>
S21	11212	christmas adj tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 10:48	
S22	292	S21 with tubing adj hanger	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 10:49	
S23	115	S22 same (completion adj string tubing adj string)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 11:00	<i>nal</i>
S24	984	(166/341,360,345,378,379).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/20 12:04	<i>nal</i>

## EAST Search History

S25	11212	christmas adj tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 11:36	
S26	1331	S25 with (surface above adj4 water rig deck)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 11:37	
S27	127	S26 and tubing adj hanger	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 11:37	<i>nac</i>
S28	91	S27 and (tubing adj string completion adj string)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 11:37	<i>nac</i>
S29	20	("20030111228" "20030196820" "20040079529" "20050121198" "20050121198" "4605074" "4907655" "4962815" "5267469" "5287741" "5337601" "5507345" "5704426" "5803186" "5826662" "5979553" "6152230" "6227301" "6318472" "6609568" "6732797").PN.	US-PGPUB; USPAT	OR	ON	2006/08/20 12:42	<i>nac</i>
S31	251	S24 and tree	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/21 07:42	
S32	1168	S21 with assembly	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 13:12	

## EAST Search History

S33	73	S32 with tubing adj hanger	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 13:12	<i>nal</i>
S34	24	S33 with string	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/20 13:13	<i>nal</i>